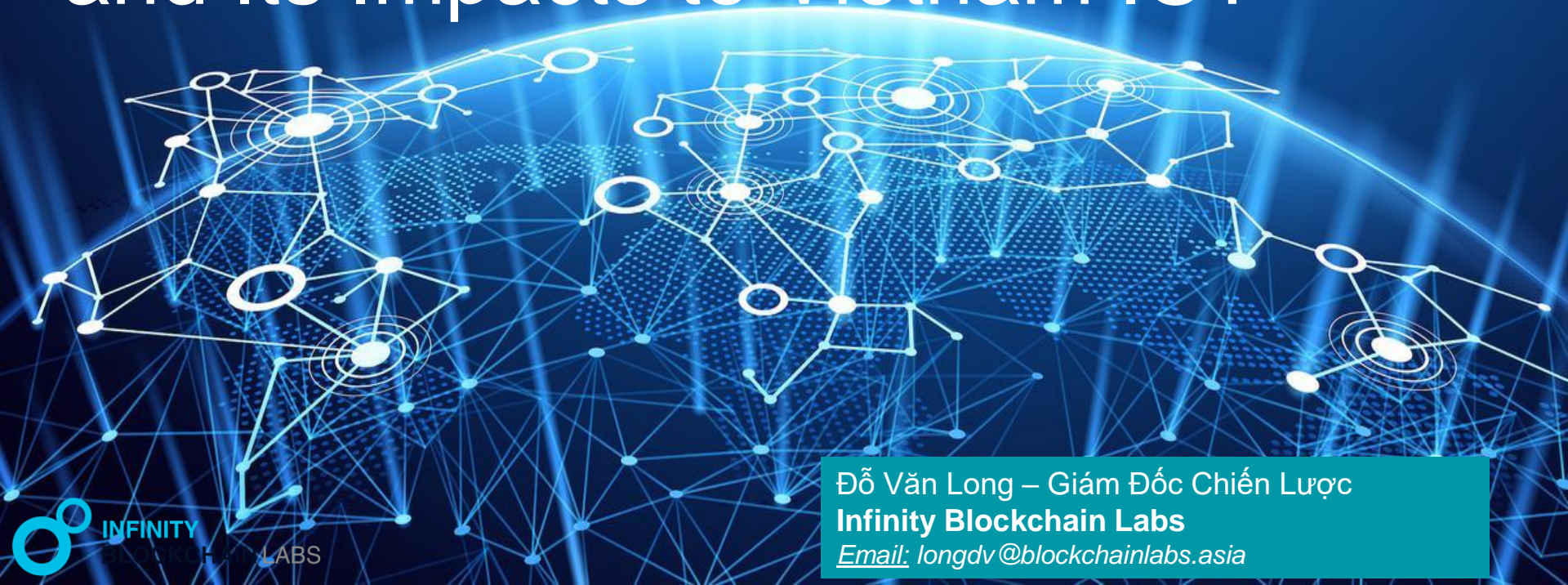


Blockchain Technology -



The Next BIG Thing After Internet and Its Impacts to Vietnam ICT



Đỗ Văn Long – Giám Đốc Chiến Lược
Infinity Blockchain Labs
Email: longdv@blockchainlabs.asia

Giới thiệu Infinity Blockchain Labs

– Đơn vị dẫn đầu về Công Nghệ 4.0 Blockchain tại Việt Nam và Quốc Tế


Research at major institutions

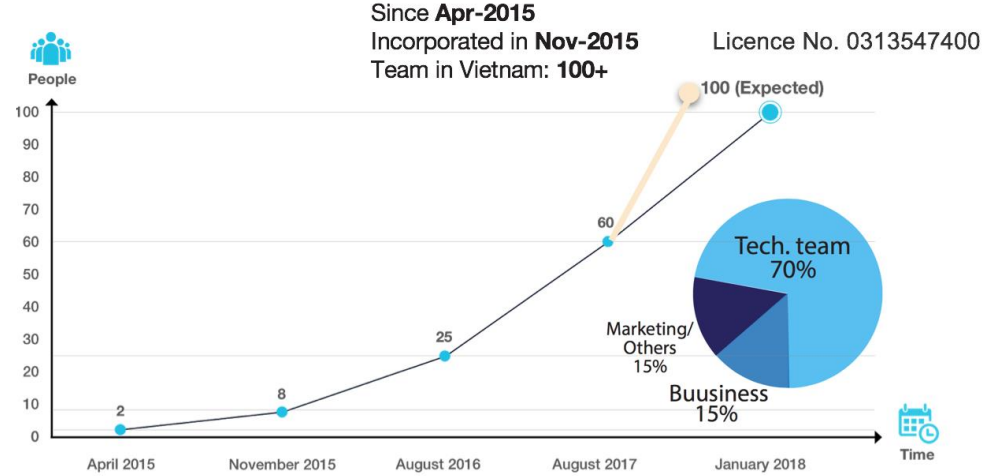

10 Universities


Bankers Association VNBA


R & D Paper


50+ Events


Fintech Club



The world's largest research and development system


FACTOM
~30 employees


WANXIANG BLOCKCHAIN LABS
~40 employees


CONSENSYS
~150 employees


INFINITY BLOCKCHAIN LABS
160+ employees

IBL triển khai các Sự kiện Công Nghệ Blockchain tại Việt Nam: 2016-2018



INFINITY BLOCKCHAIN LABS **March 2018**
Vietnam Blockchain Week

September 2017
Seamless 2017 **TERRAPINN**

July 2017
Building Digital Infrastructure for Future of Banking
INNOVATUBE
Innovatube Frontier Summit 2017

June 2017
"Blockchain amidst global identity and privacy crisis" workshop

May 2017
"Token assets on Blockchain – the future of global wealth" workshop

April 2017
Grokking TechTalk #17 - Financial Technologies

The first formal Blockchain course in Vietnam





IBL Phối hợp với Đại Học Bách Khoa TP.HCM Tổ chức khóa học Chính quy về Công nghệ Blockchain đầu tiên tại Việt Nam (11 Khóa ~ 500 Học viên, Bao gồm: Kỹ sư, Người quản lý, Doanh nghiệp ứng dụng công nghệ cao)



Liên kết với Các Trường Đại Học tại Việt Nam

(Hợp tác với hơn 20 trường Đại Học tại Việt Nam: Phổ cập Công nghệ)





APAC
CIO Outlook
BLOCKCHAIN SPECIAL
APACCIOOUTLOOK.COM
Connecting the Enterprise IT Community in Asia Pacific Countries

APAC CIO Outlook TOP 10
BLOCKCHAIN TECHNOLOGY
SOLUTION PROVIDERS - 2018

Infinity Blockchain Labs: The International Hub for Blockchain Solutions

the transformation of Vietnam into the Global Blockchain Hub." This is the motto behind Mr. Junya Yamamoto and Mr. Yamamoto founding Infinity Blockchain Labs (IBL). Vietnam's blockchain ecosystem leader. As a global blockchain pioneer, IBL is committed to advocating and inspiring through partnerships with top universities, and focuses on awareness programs throughout the country and region.

Transforming the Way Businesses run with Blockchain
Mr. Junya Yamamoto, General Director, IBL believes that blockchain technology is capable of transforming the way the world does business. IBL was founded back in 2015 due to the commitment and determination of the co-founders to capture the potentials of nascent blockchain technology.

The company develops solutions mainly on Fintech and Regtech (Regulatory Technology) to capture the next generation of blockchain - Blockchain 3.0--where blockchain technology can transform all major industries and engage major stakeholders including regulators, enterprises, and startups. RegTech Lab researches technologies, services, and products that can ensure blockchain solutions and operations are fully compliant and adhere to all regulations. The customized efforts ensure essential groups and companies minimize legal risk while maximizing freedom.

Overhauling Innovation
The lack of mainstream applications and use cases is a common challenge to blockchain solution providers. Infinity Blockchain Labs aims to diversify their partnership as well as accelerate ROC development and route to market, bringing life-changing and usual disruption of blockchain.

The company also incubates early stage blockchain-based concepts, while empowering and enhancing such ideas or products continually through their development prowess.

The Middleware
Infinity Blockchain Labs' vision reflects in all major activities of the

company - from development, partnership expansion to community outreach. The company is working on Infinito - a blockchain-as-a-service platform and Blockpass - blockchain-based AML/KYC protocol. Both projects aim to introduce, consult and enhance enterprise-grade and implementation-ready solutions for their clients. These projects act as middleware between blockchain adopters and market-ready solutions or applications, allowing shorter route-to-market cycle and enhance market feasibility and product offerings.

Infinity Blockchain Labs develops solutions mainly on Fintech and Regtech (Regulatory Technology) to capture the next generation of blockchain

Blockpass Lab is dedicated to researching and developing full compliance solutions that unite individuals, devices, objects, businesses and governments. Blockpass enables vendors, merchants and users to communicate, transact and get their identity verified through a one-stop shop gateway. This helps to reduce friction, processing time as well as costs for the users. Infinity Blockchain Labs has offered Blockpass service to retailers and financial institutions in Hong Kong, Japan, and SE Asia and the service has solved several pain points of multiple industries and institutions.

Increasing the Footprint
The company is in the process of expanding their workforce exponentially in response to customers' demands. "We are also exploring public and private blockchain to diversify our offerings to customers," adds Mr. Yamamoto. Moreover, Infinity Blockchain Labs aims to reach out to other markets in SE Asia. Together with their partners in Hong Kong, Japan and the UK the company is truly becoming an international hub for blockchain solutions. 803



Junya Yamamoto,
General Director

Infinity Blockchain Labs

Recognized as

APAC CIO Outlook TOP 10
BLOCKCHAIN TECHNOLOGY
SOLUTION PROVIDERS - 2018

The annual listing of top companies providing
Blockchain Technology Solutions in the APAC region

Annie Johnson
Managing Editor



Growing number of blockchain initiatives around the world



Bitcoin's Blockchain Is the Heart of Industry 4.0

“The blockchain is fast becoming a symbol of the fourth industrial revolution”

After steam, electricity and computing, **deep digital transformation** is now upon us.

It is heralded as the next big disruptor, it's got geeks and banks in a tizzy, but as **yet there's little mainstream evidence of major impact.**



Klaus Schwab

As Klaus Schwab, Founder and Executive Chairman, World Economic Forum, put it, “One of the main features of the Fourth Industrial Revolution is that it does not change what we are doing, it changes us.”

“Intelligent assets are also a key feature of the fourth industrial revolution”

For intelligent assets to create value in the circular economy, the development of an **open and global payment protocol** is required.



*Coincidentally, Bitcoin and its **blockchain technology** are ideal for implementing the shift to the **global, trustless, and open new economy.***

*They can fuel this new economy by allowing millions of **smart devices** to perform transparent and frictionless financial transactions, **without human intervention**, in the IoT universe.*

Intelligent Assets Report cites
Blockchain co-founder, Nicolas Cary



KEMP IT LAW

IT Law at the Apex

UK: The Fourth Industrial Revolution: Blockchain And Smart Contracts

INDUSTRY 4.0 - the digital transformation



3rd platform, innovation accelerators, OT and manufacturing meet in transformation



FROM INDUSTRY 4.0 TO FOURTH INDUSTRIAL REVOLUTION

1



Mechanization
Steam engines
Water/steam power
New manufacturing
Iron production
Textile industry
Mining and metallurgy
Machine tools
Steam factories

2



Technological
Electrification
Production line
Mass production
Globalization
Engines/turbines
Broad adoption
of telegraph,
gas, water supply

3



Computer /Internet
Digital manufacturing
PLC/Robotics
IT and OT
Digitization
Automation
Electronic/digital
Networks
Digital machines

4



Convergence IT /OT
Autonomous machine
Advanced robotics
Big Data/Analytics
Internet of Things
Digital ubiquity/Cloud
Smart factory
Machine learning & AI
Cyber Physical

4 key components in blockchain

- Database of transactions.
- Append-only.

Shared Ledger

Cryptography

- Ensure transactions are secure, valid, authenticated.

- Peer-to-Peer network.
- The Ledger is shared across P2P network.

Network

Consensus Mechanism

- All parties agree to verify transaction.
- Responsible for updating ledger.

“WHAT?”

“SMART” CONTRACT?



Voluntary arrangement



Two or more parties



Enforceable by **“CODE”**

“WHAT?”

“SMART” CONTRACT?

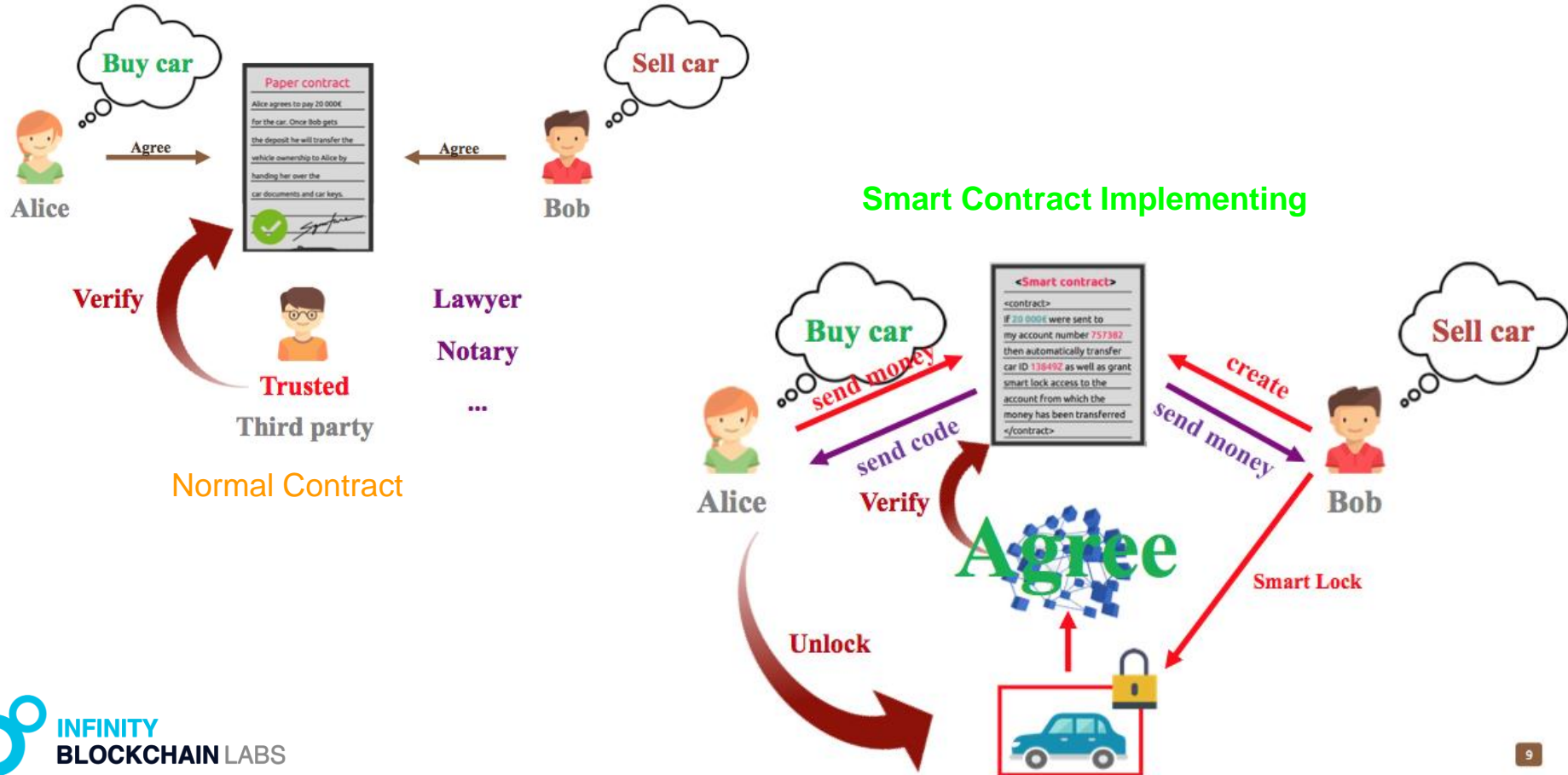


CODE



BLOCKCHAIN

Smart Contract Case Study

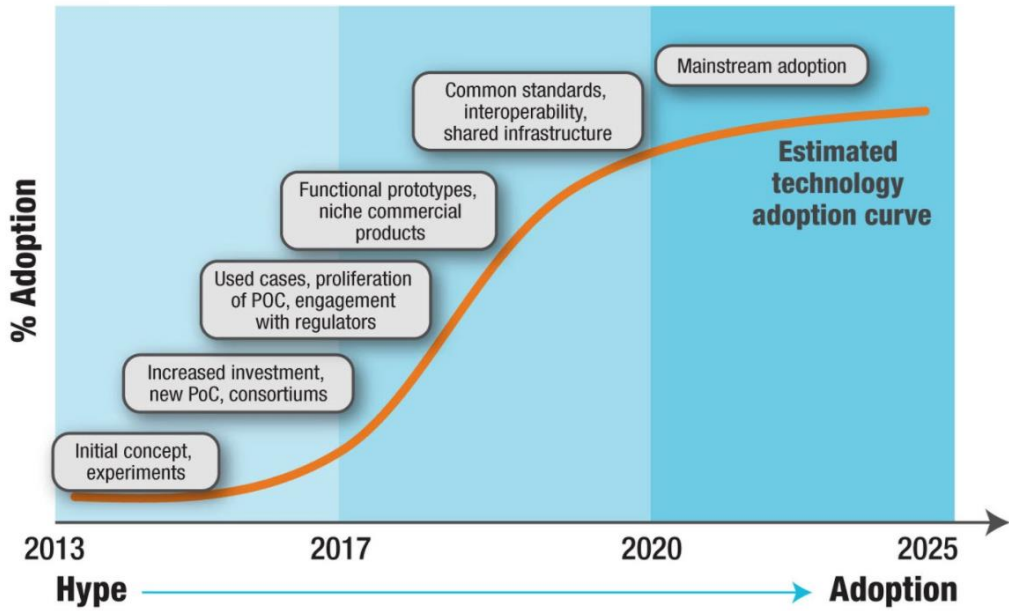
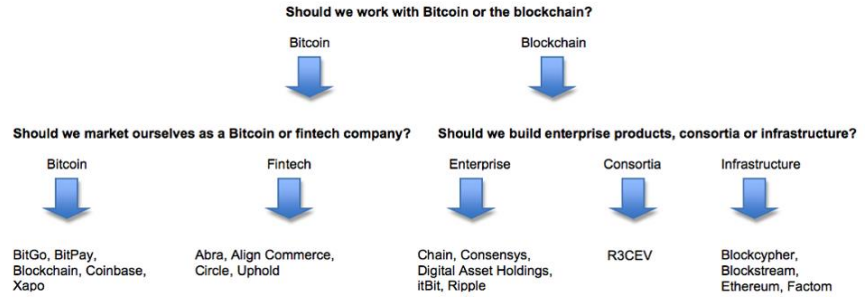
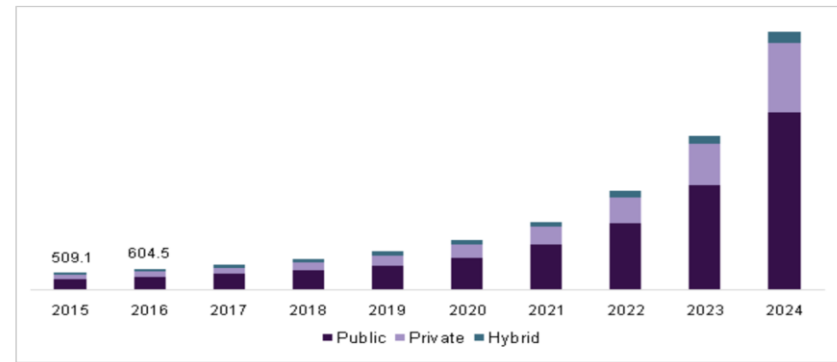




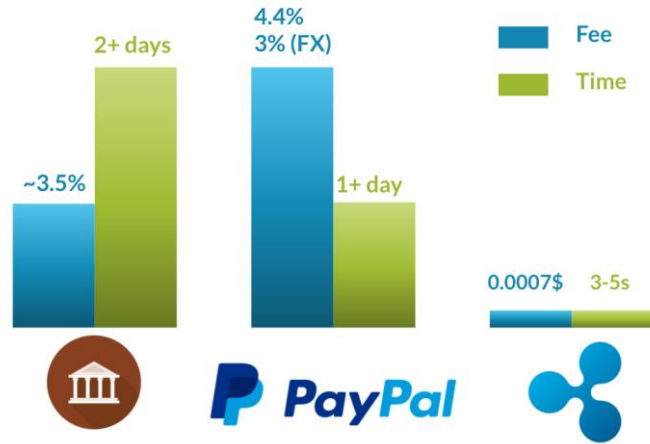
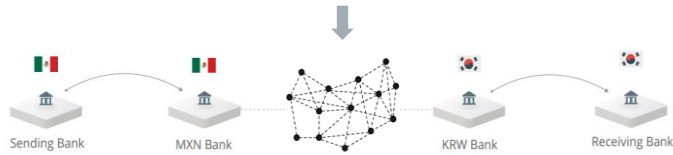
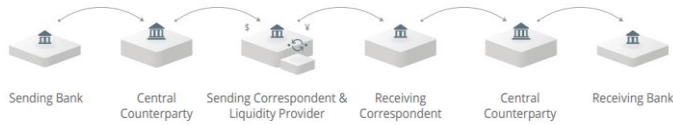
Blockchain Technology Market Analysis By Type (Public, Private, And Hybrid), By Application (Financial Services, Consumer/Industrial Products, Technology, Media & Telecom, Healthcare, Transportation, And Public Sector), By Region, & Segment Forecasts, 2015 - 2024

The worldwide blockchain technology market is forecast to reach \$7.74 billion by 2024, with the financial services sector accounting for the majority of the future market growth

Source: Grand View Research, 2017



Potential Use Cases of Blockchain and their Benefits



Potential Use Case	Key Benefits	Cost Savings per Year	Examples of Solution Providers	Estimated Implementation
KYC/AML <ul style="list-style-type: none"> On boarding new customers and identity management and authentication for policy holders using blockchain as a central utility 	<ul style="list-style-type: none"> Removal of manual multiple duplicative KYC and accelerated onboarding process Up to 90% reduction in admin costs Reduction in AML risks/frauds, associated penalties and fines Increased transparency and transaction monitoring 	6-8 \$Billion Worth of Cost Savings in KYC Compliance	Algorhythmix, KYCKI, KYC-Chain, Synchroon, Tradle, Trunomi, ShoCard	2018-2020
Trade Finance <ul style="list-style-type: none"> Transfer of trade documents Provenance and supply chain management using IoT Loans and credit financing – focus on SMEs Use of smart contracts to automate payment process, elimination of need for financial intermediaries and instruments such as L/C 	<ul style="list-style-type: none"> Reduction in paper intensive and manual processes and document sharing/courier costs Reduction in the current trade finance gap – especially in emerging economies Freeing capital tied up in trade finance processes 	\$30-40 \$Billion	ING, Societe Generale, Tallysticks, Aifa-Bank, Barclays, Tallysticks, Everledger, Bitbond	2017-2019
Insurance <ul style="list-style-type: none"> Underwriting/Pricing Payments and Collections Claim Management Risk Management New Products such as Microinsurance and P2P Insurance Automatic pay outs 	<ul style="list-style-type: none"> Reduce average claims administration costs Reduce damage from fraud Improve identification of claim events 	40 -50 \$Billion cut in costs and expenses	Auxesis, Safeshare, Kyobo, Generali, AXA	2022 onwards
P2P Payments <ul style="list-style-type: none"> Transfer of money using digital currencies or cryptocurrencies 	<ul style="list-style-type: none"> Elimination of paper based processes Lower processing fee Reduction in processing time 	3-5 \$Billion	Verse, Abra, BitPesa, CoinPip	2016-2019
Capital Markets <ul style="list-style-type: none"> Mutualization of Data Automatic transaction matching, reconciliation and settlement Automatic DVP on cash ledger Repurchase agreements matching 	<ul style="list-style-type: none"> Removal in lag between trade and settlement time No central clearing system required Reduction in Errors 	50-60 \$Billion in operational and IT costs	Digital Assets Holding, Equichain, Clearmatics, NASDAQ	2020 onwards
Syndicated Loans <ul style="list-style-type: none"> Data communication Automatic position reconciliation 	<ul style="list-style-type: none"> Elimination of paper based processes Accelerated settlement time Removal of need for reconciliation Reduced errors and discrepancies 	10-15 \$Billion	Synapsloans	2018-2022

Blockchain use cases list by industry

Financial

Trading
Deal origination
POs for new securities
Equities
Fixed income
Derivatives trading
Total Return Swaps (TRS)
2nd generation derivatives
The race to a zero middle office
Collateral management
Settlements
Payments
Transferring of value
Know your client (KYC)
Anti money laundering
Client and product reference data.
Crowd Funding
Peer-to-peer lending
Compliance reporting
Trade reporting & risk visualizations
Betting & prediction markets

Insurance

Claim filings
MBS/Property payments
Claims processing & admin
Fraud prediction
Telematics & ratings

Media

Digital rights mgmt
Game monetization
Art authentication
Purchase & usage monitoring
Ticket purchases
Fan tracking
Ad click fraud reduction
Resell of authentic assets
Real time auction & ad placements

Computer Science

Micronization of work (pay for algorithms, tweets, ad clicks, etc.)
Expanse of marketplace
Disbursement of work
Direct to developer payments
API platform plays
Notarization & certification
P2P storage & compute sharing
DNS

Medical

Records sharing
Prescription sharing
Compliance
Personalized medicine
DNA sequencing

Asset Titles

Diamonds
Designer brands
Car leasing & sales
Home Mortgages & payments
Land title ownership
Digital asset records

Government

Voting
Vehicle registration
WIC, Vet, SS, benefits, distribution
Licensing & identification
Copyrights

Identity

Personal
Objects
Families of objects
Digital assets
Multifactor Auth
Refugee tracking
Education & badging
Purchase & review tracking
Employer & Employee reviews

IoT

Device to Device payments
Device directories
Operations (e.g. water flow)
Grid monitoring
Smart home & office management
Cross-company maintenance markets

Payments

Micropayments (apps, 402)
B2B international remittance
Tax filing & collection
Rethinking wallets & banks

Consumer

Digital rewards
Uber, AirBNB, Apple Pay
P2P selling, craigslist
Cross company, brand, loyalty tracking

Supply Chain

Dynamic ag commodities pricing
Real time auction for supply delivery
Pharmaceutical tracking & purity
Agricultural food authentication
Shipping & logistics management

Blockchain applying on Crowdfunding (ICOs)

TenX \$67M



Status \$100M



Tezos \$232M



Bancor \$150M



EOS \$185M



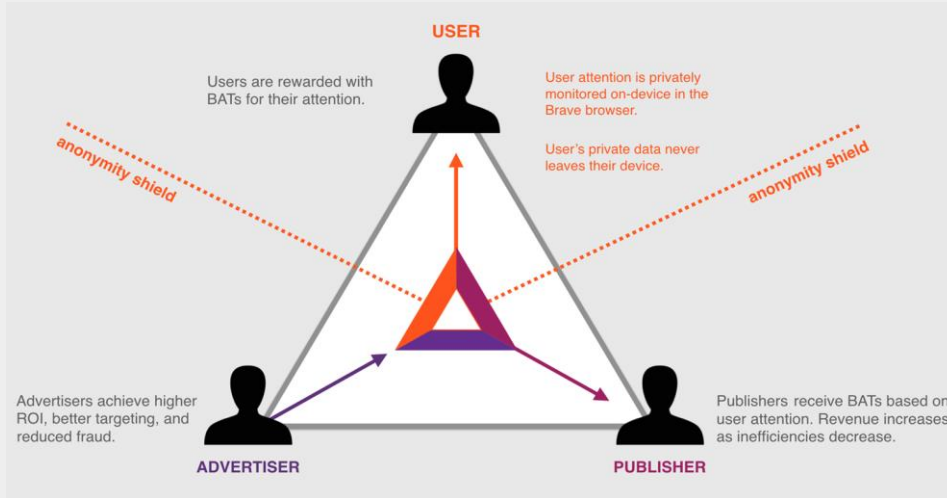
Filecoin \$252M

Brave ICO: \$35 million

30 seconds



Brendan Eich






Triển khai và giới thiệu giải pháp “Truy xuất nguồn gốc Xoài sử dụng công nghệ cao” tại các Hội Nghị trong và ngoài nước



Kiểm tra nguồn gốc sản phẩm trên Blockchain

Thông tin sản phẩm

- Mã sản phẩm: 62515327
- Tên sản phẩm: XOÀI CAO LẠNH (CÁT CHU)
- Ngày sản xuất: 2018-04-05
- Số ngày đã xuất xưởng: 4
- Vị của xoài



Thông tin nhà cung cấp

- Tên nhà cung cấp: HỢP TÁC XÃ XOÀI MỸ XƯƠNG
- Địa chỉ: Số 637, Khu dân cư Trung tâm, ấp Mỹ Thới, xã Mỹ Xương, huyện Cao Lãnh, tỉnh Đồng Tháp
- Mã số thuế: 1401541495
- Giống: Xoài Cao Lãnh (Cát Chu)
- Tổ sản xuất: Tất cả các tổ sản xuất thuộc Hợp tác xã
- Xoài an toàn, sản xuất theo tiêu chuẩn VietGAP
- Liên hệ: 0918.699.578 (Mr. Càn)

Thông tin trên Blockchain

- Địa chỉ Ethereum Blockchain: 62515327
- Để kiểm tra, click vào [đây](#), sau đó bấm "Convert to Ascii" để xem thông tin



Kiểm tra nguồn gốc sản phẩm trên Blockchain

Thông tin sản phẩm

- Mã sản phẩm: [62515327](#)
- Tên sản phẩm: [XOÀI CAO LÃNH \(CÁT CHU\)](#)
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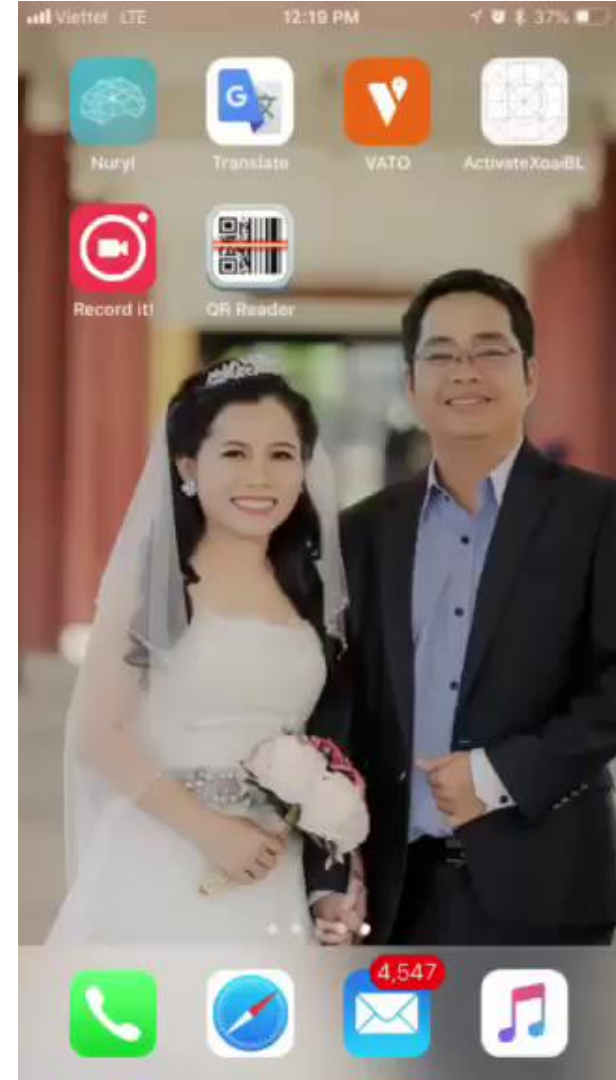


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- Địa chỉ Ethereum Blockchain: [62515327](#)
- Để kiểm tra, click [vào đây](#), sau đó bấm "Convert to Ascii" để xem thông tin



Blockchain Legal & Regulation - Main focusing of countries

- (1) developing a **legal framework** for management,
- (2) issuing **tax policies** for investment and business of cryptocurrency,
- (3) having policy for **protecting** the cryptocurrencies' **owner**,
- (4) **prohibiting** transactions of cryptocurrency which issued **personally**.



THANK YOU